

WHAT IS CLAIMED IS:

1. A rear substrate in a plasma display panel including a first substrate through which an image is transmitted to a viewer, and the rear substrate 5 arranged in facing relation to the first substrate, comprising:

(a) an electrically insulating substrate;
(b) a plurality of data electrodes arranged on the substrate and spaced away from one another;

(c) a plurality of partition walls formed on the substrate; and

10 (d) a phosphor layer covering the substrate and the data electrodes therewith between adjacent partition walls,

wherein at least one partition wall and another partition wall among the partition walls are joined to each other at at least one of opposite ends thereof in a length-wise direction through a curved partition wall, the another partition 15 wall extending in the same direction as a direction in which the at least one partition wall extends.

2. The rear substrate as set forth in claim 1, wherein the at least one partition wall and the another partition wall are arranged adjacent to each other.

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3. The rear substrate as set forth in claim 1, wherein the partition walls include first, second, third and fourth partition walls arranged in this order, and wherein the first and third partition walls are connected at at least one of opposite ends thereof in a length-wise direction to each other through a first 25 curved partition wall, the second and fourth partition walls are connected at at least one of opposite ends thereof in a length-wise direction to each other through a second curved partition wall, and the first and second curved partition walls intersect with each other.

4. The rear substrate as set forth in claim 1, wherein every N partition walls among the partition walls are connected at at least one of opposite ends thereof in a length-wise direction to each other through the curved partition wall, the N being a positive integer equal to or greater than one.

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5. The rear substrate as set forth in claim 1, wherein a first pair of partition walls among the partition walls is connected at at least one of opposite ends thereof in a length-wise direction to each other through the curved partition wall, a second pair of partition wall is surrounded by the first pair of partition walls, 10 and the second pair of partition walls among the partition walls is connected at at least one of opposite ends thereof in a length-wise direction to each other through the curved partition wall.

6. The rear substrate as set forth in claim 1, wherein the partition walls are 15 comprised of $2N$ partition walls, N being a positive integer equal to or greater than two, and wherein a M -th partition wall is connected at at least one of opposite ends thereof in a length-wise direction to an associated end of a $(2N \cdot M + 1)$ -th partition wall through the curved partition wall, M being a positive integer in the range of one (1) to N both inclusive.

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7. The rear substrate as set forth in claim 6, wherein a curved partition wall connecting the M -th partition wall and the $(2N \cdot M + 1)$ -th partition wall to each other therethrough has a width equal to or greater than a width of a curved partition wall connecting a $(M + 1)$ -th partition wall and a $(2N \cdot M)$ -th partition wall 25 to each other therethrough.

8. The rear substrate as set forth in claim 6, wherein one of the M -th partition wall and the $(2N \cdot M + 1)$ -th partition wall wherein M is equal to one (1) is located outermost of a display area of the plasma display panel.

9. The rear substrate as set forth in claim 1, wherein the curved partition wall is semi-circular.

5 10. The rear substrate as set forth in claim 1, wherein the partition walls extend in a first direction in parallel with one another.

10 11. The rear substrate as set forth in claim 1, wherein each of the partition walls is comprised of a first partition wall extending in a first direction and a second partition wall extending in a second direction perpendicular to the first direction.

15 12. The rear substrate as set forth in claim 1, wherein each of the partition walls is comprised of a first partition wall extending in a first direction and a second partition wall extending in a second direction perpendicular to the first direction only between adjacent first partition walls.

20 13. The rear substrate as set forth in claim 1, wherein the rear substrate includes a display area in which images are displayed, and a non-display area surrounding the display area, in which images are not displayed,

the rear substrate includes flit-stoppers arranged in the non-display area in facing relation to a pair of partition walls connected at at least one of opposite ends thereof in a length-wise direction to each other through the curved partition wall,

25 the flit-stoppers are comprised of curved lines, and

the flit-stoppers are arranged each overlapping adjacent flit-stoppers, and surround the display area.

14. The rear substrate as set forth in claim 13, wherein each of the

flit-stoppers is circular.

15. A plasma display panel comprising a first substrate through which an image is transmitted to a viewer, and a second substrate arranged in facing 5 relation to the first substrate,

the first substrate comprising:

(A) a first transparent substrate;

(B) at least one scanning electrode formed on the first transparent substrate in facing relation to the second substrate;

10 (C) at least one common electrode formed on the first transparent substrate in facing relation to the second substrate; and

(D) a dielectric layer covering the first transparent substrate, the scanning electrode and the common electrode therewith,

the second substrate comprising:

15 (a) an electrically insulating substrate;

(b) a plurality of data electrodes arranged on the substrate and spaced away from one another;

(c) a plurality of partition walls formed on the substrate; and

(d) a phosphor layer covering the substrate and the data electrodes

20 therewith between adjacent partition walls,

wherein at least one partition wall and another partition wall among the partition walls are joined to each other at at least one of opposite ends thereof in a length-wise direction through a curved partition wall, the another partition wall extending in the same direction as a direction in which the at least one 25 partition wall extends.

16. The plasma display panel as set forth in claim 15, wherein the at least one partition wall and the another partition wall are arranged adjacent to each other.

17. The plasma display panel as set forth in claim 15, wherein the partition walls include first, second, third and fourth partition walls arranged in this order, and wherein the first and third partition walls are connected at at least one of 5 opposite ends thereof in a length-wise direction to each other through a first curved partition wall, the second and fourth partition walls are connected at at least one of opposite ends thereof in a length-wise direction to each other through a second curved partition wall, and the first and second curved partition walls intersect with each other.

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18. The plasma display panel as set forth in claim 15, wherein every N partition walls among the partition walls are connected at at least one of opposite ends thereof in a length-wise direction to each other through the curved partition wall, the N being a positive integer equal to or greater than one.

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19. The plasma display panel as set forth in claim 15, wherein the partition walls are comprised of $2N$ partition walls, N being a positive integer equal to or greater than two, and wherein a M -th partition wall is connected at at least one 20 of opposite ends thereof in a length-wise direction to an associated end of a $(2N \cdot M + 1)$ -th partition wall through the curved partition wall, M being a positive integer in the range of one (1) to N both inclusive.

20. The plasma display panel as set forth in claim 19, wherein a curved partition wall connecting the M -th partition wall and the $(2N \cdot M + 1)$ -th partition 25 wall to each other therethrough has a width equal to or greater than a width of a curved partition wall connecting a $(M + 1)$ -th partition wall and a $(2N \cdot M)$ -th partition wall to each other therethrough.